

## ***Wisconsin Teaching Fellowship 2007***

### **Final Report Abstract**

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The impetus for this project was my observation that many students treat each chapter of their biology text as a “stand-alone” unit, often making few, if any, connections among the chapters. The approach to teaching in biology has traditionally focused on broad coverage through the introduction of an extensive range of topics, which probably contributes to the student illusion of the discipline as a collection of facts. The combination of our teaching approach and the students’ tendency toward dualism as they enter college probably work together to keep students narrowly focusing on the “facts” rather than recognizing and connecting information to the broader scope(s) with which biologists view the world. This project would strive to find a way to help students connect the concepts they learn to one another, and to the overarching themes in biology, particularly biological diversity and biological organization.

I have designed an exercise that asks students to articulate the connections that they see among various concepts and facts selected from multiple chapters of their text. I intend to analyze these for accuracy, extent, and depth. This analysis will be compared to student scores on the Motivated Strategies for Learning Questionnaire, as well as student grades. It is my hope that these data will provide preliminary insight as to the reasons students tend to compartmentalize knowledge in introductory courses rather than making connections. Once stumbling blocks are identified, teaching strategies will be directed at helping students develop a more sophisticated approach to the discipline.